



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/941,558      | 08/30/2001  | Mamoru Shimoda       | 2936-0134P          | 6110             |

2292 7590 10/05/2005

BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER

VAN HANDEL, MICHAEL P

ART UNIT PAPER NUMBER

2617

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                       |  |  |
|------------------------------|---------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>09/941,558  | <b>Applicant(s)</b><br>SHIMODA, MAMORU |  |
|                              | <b>Examiner</b><br>Michael Van Handel | <b>Art Unit</b><br>2617                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims **1-4, 6-7** are rejected under 35 U.S.C. 102(b) as being anticipated by Yonekura et al.

Referring to claim 1, Yonekura et al. discloses a radio-frequency receiver comprising:

- a mixer 17 for mixing a received radio-frequency signal with a local signal to convert the radio-frequency signal into an intermediate-frequency signal or baseband signal (col. 4, l. 8-17)(Fig. 2A);
- a local signal generator 19 (col. 4, l. 49-57)(Fig. 2A);
- a level switcher 37 for switching an output signal level of the local signal generator (col. 4, l. 53-57); and
- a controller 79 for controlling the level switcher according to a frequency of the received signal (col. 6, l. 25-35).

Referring to claim 2, Yonekura et al. discloses a radio-frequency receiver as claimed in claim 1, wherein the local signal generator comprises a voltage-controlled oscillator 53, 55 and a frequency multiplier circuit 37 for multiplying a frequency of an output signal of the voltage-controlled oscillator (col. 4, l. 66-67)(col. 5, l. 1-6).

Referring to claim 3, Yonekura et al. discloses a radio-frequency receiver as claimed in claim 2, wherein the local signal generator includes a phase-locked loop circuit 35 for controlling an oscillation frequency of the voltage-controlled oscillator (col. 4, l. 49-65), and the controller controls the voltage-controlled oscillator through the phase-locked loop circuit by using a control signal, and also controls the level switcher by using another control signal corresponding to the control signal (col. 5, l. 42-45)(col. 6, l. 32-35).

Referring to claim 4, Yonekura et al. discloses a radio-frequency receiver as claimed in claim 1, wherein the level switcher comprises a regulator 33 and a switch for varying an output voltage of the regulator, and varies a gain of the frequency multiplier circuit by using the output voltage of the regulator (col. 7, l. 20-40).

Referring to claim 6, Yonekura et al. discloses a radio-frequency receiver as claimed in claim 1, wherein the local signal generator comprises a plurality of VCOs 53, 55 and a VCO switcher 63 for switching among the VCOs so that one of the VCOs is selected and connected to the frequency multiplier circuit at a time (col. 7, l. 18-40).

Referring to claim 7, Yonekura et al. discloses a radio-frequency receiver as claimed in claim 6, wherein the controller controls both the level switcher and the VCO switcher according to the frequency of the received signal (col. 6, l. 32-35).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over unpatentable in view of Yonekura et al. in view of Pugel.

Referring to claim 5, Yonekura et al. discloses a radio-frequency receiver as claimed in claim 1. Yonekura et al. does not disclose that the radio-frequency receiver is for receiving digital satellite broadcast. Pugel discloses a digital satellite video signal receiver (col. 5, l. 33-41). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify Yonekura et al. to receive digital satellite video signals such as that taught by Pugel in order to increase the amount of information that can be transmitted to the receiver and increase the number of users that can easily receive the information.

#### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Van Handel whose telephone number is 571.272.5968. The examiner can normally be reached on Monday-Friday, 8:00am-5:30pm.

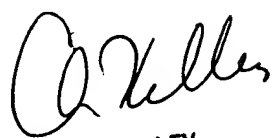
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571.272.7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2617

Michael Van Handel  
Examiner  
Art Unit 2617

MVH



CHRIS KELLEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600